

	COURAGE-Like (n=1003)	Non COURAGE- Like (n=3794)	p-value	
Age (years)	64.8 ± 10.7	64.7 ± 11.2	0.8280	
Male Gender	67.6%	69.0%	0.4216	
Diabetes	33.3%	35.6%	1.000	
DAPT Usage at 1 year	81.4%	78.9%	0.0991	
ARC Definite/Probable Stent Thrombosis (0-365 days)	0.41%	0.93%	0.1584	
Cardiac Death and WHO MI	3.0%	3.3%	0.7619	
Cardiac Death and ARC MI	5.6%	6.4%	0.4138	
TLF (cardiac death, any WHO MI attributed to the target vessel, and clinically indicated target lesion revascularization)	5.5%	8.6%	0.1670	
TLF (cardiac death, any ARC MI attributed to the target vessel, and clinically indicated target lesion revascularization)	7.0%	8.6%	0.1180	
Quality of Life	Baseline (n=4443)	180 days (n=3602)	365 days (n=3411)	p-value
COURAGE-Like Patients mean ± SD, (n) [95% Confidence Interval]	57.5 ± 25.9 (n=915) [55.81%, 59.17%]	79.3 ± 20.3 (n=758) [77.81%, 80.71%]	80.8 ± 19.0 (n=726) [79.41%, 82.17%]	<0.0001
Non COURAGE- Like Patients mean ± SD, (n) [95% Confidence Interval]	54.5 ± 25.8 (n=3528) [53.63%, 55.34%]	76.3 ± 21.7 (n=2844) [75.46%, 77.06%]	77.2 ± 21.7 (n=2685) [76.35%, 78.0%]	<0.0001
p-value	0.0002	0.0008	0.0001	0.8568 [Interaction p-value]
QoL DAILY Angina Cohort	Baseline	365 Days	p-value	
COURAGE-Like Patients	32.1 ± 18.2 (n=59)	72.2 ± 23.4 (n=45)	<0.0001	
Non COURAGE-Like Patients	30.3 ± 19.0 (n=318)	62.9 ± 26.5 (n=218)	<0.0001	
QoL WEEKLY Angina Cohort	Baseline	365 Days	p-value	
COURAGE-Like Patients	41.1 ± 20.2 (n=261)	76.0 ± 21.1 (n=204)	<0.0001	
Non COURAGE-Like Patients	40.9 ± 19.8 (n=980)	72.5 ± 23.0 (n=722)	<0.0001	
QoL MONTHLY Angina Cohort	Baseline	365 Days	p-value	
COURAGE-Like Patients	55.9 ± 19.4 (n=308)	79.7 ± 18.0 (n=239)	<0.0001	
Non COURAGE-Like Patients	55.2 ± 21.4 (n=1289)	79.1 ± 19.7 (n=932)	<0.0001	
QoL ANGINA FREE Cohort	Baseline	365 Days	p-value	
COURAGE-Like Patients	79.7 ± 21.0 (n=280)	87.7 ± 14.4 (n=220)	0.0009	
Non COURAGE-Like Patients	76.6 ± 21.7 (n=906)	84.1 ± 17.2 (n=718)	<0.0001	

**Conclusion:** This represents the first time that patient-reported outcomes have been reported in both COURAGE-like and non COURAGE-like patients exclusively receiving a DES. Although there were no differences in clinical outcomes, marked improvements in patient's health status were observed 12 months after XIENCE V. QoL significantly improved with the two groups behaving similarly over time. There were consistent improvements in QoL across all angina burden cohorts with improvements occurring early, being sustained for 1 year and most notable when angina burdens were greatest. These data extend patient's perspectives on the benefits of PCI.

## TCT-199

### ENERGY 1'000 Patient Registry with a Thin Strut Bare Metal Stent with Passive Coating Presenting Six Month Follow-Up MACE

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**Background:** The PRO Kinetic Energy is a thin strut (60 µm) cobalt chromium alloy (L605) bare metal stent, which is completely coated with a thin layer of amorphous silicon carbide PROBIO. The aim of this registry is to evaluate the clinical performance of the PRO-Kinetic Energy stent system in a large patient population in standard clinical care.

**Methods:** Between April 09, and November 09, 2010, 1'016 subjects presenting with de-novo and re-stenotic coronary artery lesions were consecutively enrolled in this international, multicentric ENERGY Registry. Primary safety endpoint was MACE (composite of cardiac death, clinically driven TLR, myocardial infarction and acute myocardial infarction) at six-month follow-up. Additional follow-up assessments are defined in the protocol for 12 and 24 months. Quality of Life (EQ-5D) evaluation will be performed in a subgroup on all follow-up intervals. Following subgroups were pre-specified: diabetes, AMI, unstable angina, small vessel (< 2.75 mm) and elderly patients (> 75 yrs).

**Results:** Seven hundred eighty-nine men (78%) with a mean age of 66 ± 12.5, ranging

from 27 - 96 years, were enrolled in 48 sites in 10 countries. The majority of the subjects presented with hypertension (71%), hyperlipidemia (68%) smoker (31%), diabetes (16%). Fourteen percent of the patients experienced unstable angina. ACS due to MI was seen in 452 patients. The portion of elderly patients is represented by 19%. Type A (21%), B1 (40%), B2 (29%) and C (10%) lesions were seen in this cohort. Eighty-six percent (874/1016) follow up compliance at six-month follow-up was achieved. MACE (hierarchical) occurred in 4.7% subjects between baseline and 6-month follow-up including 2.5% target lesion revascularizations, 2.3% stent thrombosis, 1.5% myocardial infarctions (incl. AMI) and 0.7% cardiac death.

**Conclusion:** New generation bare metal stents (BMS) like the PRO-Kinetic Energy with very thin struts and passive coating show a very low rate of MACE compared to previous BMS. Utility of such modern BMS platforms are still very relevant in the era of DES.

## TCT-200

### DES vs. MIDCAB for Proximal LAD disease: Long Term Registry Results

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**Background:** The minimally invasive direct coronary artery bypassing (MIDCAB) has proven its superiority over bare metal stenting of proximal left anterior descending (LAD) artery in reducing the need of repeated revascularizations. Nevertheless, the long term outcome of percutaneous coronary intervention (PCI) utilizing new generation of drug eluting stenting (DES), in this lesion subset is unknown.

**Methods:** This is a multicenter retrospective registry of 463 consecutive patients, enrolled between 2004 and 2009 with proximal, significant, type B and C LAD lesion (>70% DS) who underwent either PCI with exclusive use of DES (72% of 2nd. generation) or MIDCAB. We excluded patients with myocardial infarction (MI) on admission, concomitant lesions in the right and/or circumflex coronary arteries, previous PCI within 6 months, or previous CABG. A propensity score was utilized for patients baseline characteristics matching and results adjustment.

**Results:** One hundred and eighty seven patients underwent PCI with DES while 276 MIDCAB. Patients in PCI group were older (63.6 ± 9.3 vs. 59.7 ± 10.2 y.o.; p<0.05), more often female (32 vs. 21%; p<0.01) had higher CCS class (2.53 ± 0.9 vs. 2 ± 0.3; p<0.01), higher Euroscore (4 vs. 2.2; p<0.01) and more often presented with peripheral artery disease (8 vs. 2%; p<0.01). At 30 day follow up there was no death in both groups. There were also no differences in the occurrence of major adverse cardiovascular and cerebral events (MACCE) defined as death, stroke, myocardial infarction or repeated revascularization between PCI and MIDCAB groups (0% vs. 0.7%; p=0.22). However there were less serious adverse events (SAE) defined as atrial fibrillation, wound infection, low output syndrome or serious bleeding in patients who underwent MIDCAB (0 vs. 5%; p<0.01). After adjustment at 5 year follow up there were no differences in survival (93.5 vs. 95.7%; p=0.56), MACCE free survival (64.9 vs. 74.4%; p=0.12) and MI – free survival (94.9 vs. 95.8%; p=0.46) between PCI and MIDCAB respectively. There was significantly higher freedom from repeated revascularization in patients who underwent MIDCAB (86.4 vs. 64.1%; p=0.01).

**Conclusion:** Both procedures show exceptional safety, with no deaths and only minor adverse events rate at periprocedural period. At long term PCI with DES is not inferior to MIDCAB with regard to safety endpoints. The rate of repeated revascularizations remained higher in the PCI group

## TCT-201

### Incidence of Periprocedural Myocardial Infarction Following Stent Implantation: Comparison Between First and Second Generation Drug-Eluting Stents

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**Background:** Drug eluting stents (DES) of the first and second generation, differ in their coating material which may have implications for the incidence of periprocedural myocardial infarction (PMI). Our aim was to compare the incidence of PMI using the revised Academic Research Consortium (ARC) definition of PMI between Taxus Liberté, Endeavor Sprint, Endeavor Resolute and Xience V.

**Methods:** We assessed 800 patients treated with first (Taxus Liberté or Endeavor) or second generation DES (Xience V or Resolute). Each DES group consisted of 200 consecutive patients, who were treated during the transition from first to second generation DES. Routine peri-interventional assessment of cardiac biomarkers was performed to compare the incidence of PMI between DES groups according to ARC: 2x upper reference limit of creatine kinase (CK), confirmed by CK-MB elevation.

**Results:** In 800 patients, a total of 1522 DES (363 Taxus; 385 Endeavor; 382 Xience V; 392 Resolute) were implanted to treat 1232 lesions. Patient characteristics did not